Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
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Amendment of Sections 90.621(c) and (d) of the Commission's Rules and Regulations Concerning Separations Between 800 and 900 MHz Land Mobile Radio Systems in the Business and General Category Radio Service Pools	)	PR Docket 93-60

To: The Commission

COMMENTS OF THE
UTILITIES TELECOMMUNICATIONS COUNCIL

I. Introduction

UTC is the national representative on communications matters for the nation's electric, gas, water and steam utilities, and natural gas pipelines. Approximately 2,000 utilities and pipelines are members of UTC, ranging in size from large combination electric-gas-water utilities serving millions of consumers to small rural electric cooperatives and water districts serving only a few thousand consumers. All utilities depend on reliable communications facilities to carry out their public service obligations, and most operate private land mobile facilities. UTC is therefore interested in any proceedings that would affect the efficient licensing and use of private land mobile radio spectrum.

This proceeding was initiated by the Commission in response to a Petition for Rulemaking (Petition) filed March 6, 1992, by the National Association of Business and Educational Radio, Inc. (NABER). NABER's Petition urged the FCC to eliminate the disparity between the separation distances for Specialized Mobile Radio (SMR) and non-SMR stations in the 800 MHz and 900 MHz bands. Currently, SMR stations may be licensed at less than 70 miles standard separation based on the non-overlap of an existing station's 40 dBu service contour and a proposed station's 22 dBu interference contour, using a standard mileage

separation table. Non-SMR stations, however, are currently licensed on a 40/30 dBu short-spacing standard.

UTC filed a statement[2/] supporting the NABER Petition and urging the FCC to apply the same standard to the Industrial/Land Transportation pool.

II. A 40/22 dBu Interference Standard Should Apply to All Part 90, Subpart S Eligibles

UTC agrees with the FCC's proposal in the NPRM to establish a 40/22 dBu interference standard for all Part 90, Subpart S radio systems operating above 800 MHz. UTC believes that the increased protection outweighs the loss in frequency reuse resulting from the such a standard.

Further, as the Commission recognized in the NPRM, parties supporting the 40/22 dBu standard raised many points in support of the new standard, including: (1) local topography often results in lesser system performance than is indicated for the 40/30 dBu standard; (2) increased mobile receiver sensitivity creates a need for greater co-channel protection; (3) wide-area systems need greater interference protection to ensure complete coverage; (4) systems that use portables instead of mobiles need greater

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[2/] "Statement of the Utilities Telecommunications Council in Support of Petition for Rule Making", RM-8028 (Aug. 12, 1992).

protection; and (5) protection greater than the 40/30 standard has been afforded to cellular stations. For these reasons, UTC supports the Commission's proposed 40/22 dBu standard.

Moreover, UTC supports the application of the new standard to all Subpart S eligibles, including, in particular, Industrial/Land Transportation (I/LT) licensees. Frequencies in the I/LT pool are subject to intercategory sharing, and applicants in other categories are increasingly requesting waivers to operate on I/LT frequencies on a short-spaced basis. Fairness and good spectrum management, therefore, require that the same interference criteria apply to the protection of non-commercial radio systems and to commercial Specialized Mobile Radio (SMR) systems.

III. A More Accurate Methodology for Predicting Field Strength Should Be Implemented

UTC commends the Commission for its recognition that

UTC agrees with the Industrial Telecommunications Associations, Inc.'s (ITA) statement[3/] that "[s]eparation tables are ill-equipped to accommodate unique operating circumstances" and that application of the proposed separation table is inappropriate "without first ensuring that the R-6602 curves represent the most appropriate prediction model."[4/]

To address this problem, UTC recommends that the Commission: (1) adopt a more precise method for predicting field strength as the basis for the separation tables; and (2) permit applicants to choose whether to base their proposed separation distance on the distance specified in the table or on actual coverage contours.

First, the Commission should adopt a more precise methodology than is currently proposed. A proper propagation methodology should take into account terrain variability. Although UTC does not take a position as to which model should replace the Commission's R-6602 curves,

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[3/] PR Docket No. 93-60 (April 15, 1993).

[4/] ITA at 5-6.

it does believe that the current methodology should be replaced.[5/]

The Commission should also permit an applicant for a short-spaced license to prove either by the separation table or by actual computed contours that it meets the 40/22 dBu separation distance. Use of the table would be considered prima facie evidence of compliance with the 40/22 standard. However, in the case of a controversy regarding the proper separation distance, actual computed contours would be used. Further, an applicant could use actual contours if it felt that the terrain would permit shorter spacing than was suggested by the table.

Under UTC's plan, the administrative convenience of a separation table would be retained in most instances. However, the accuracy of actual computed contours would be available where necessary due to the imprecise nature of the separation table.

[5/] See Aurand and Post, "A Comparison of Prediction Methods for 800 MHz Mobile Radio Propagation," IEEE Transactions on Vehicular Technology, Vol. VT-34, No. 4 (Nov. 1985).

IV. The Current 70 Mile Separation Distance Should Be Retained For Maximum Power/Height Antennas and the Minimum Separation Distance Should Be Limited to 50 Miles Regardless of Station Parameters

UTC supports the Commission's proposals regarding separation distances. The Commission proposes to retain the current 70 mile separation distance for systems with

parameters would require Industrial licensees, such as utilities, to install more relay stations to achieve the necessary coverage.

VI. Additional Protection is Not Necessary To/From Mobile Units

UTC agrees with the Commission's proposal to provide no additional protection other than the 40/22 dBu standard to prevent interference to or from mobile units. No additional protection is necessary in view of the new, stricter 40/22 dBu interference standard. This standard will minimize interference to/from mobiles and short-spaced base stations.

UTC is opposed to limiting the effective radiated power (ERP) to/from mobiles. This is unnecessary under the new 40/22 dBu standard. Additionally, a limit on the ERP of mobiles would decrease the range of the mobiles and result in the need for more relay and/or base stations to cover the same service territory.

VII. Conclusion

UTC supports the Commission's proposal to apply a 40/22 dBu interference standard to all Part 90, Subpart S applicants for short-spaced licenses. However, in establishing a separation distances table based on this standard, a more accurate methodology for predicting field

strength should be adopted. Also, the Commission should permit the use of actual computed coverage contours by applicants. The Commission should retain current maximum facility parameters and separation distances and provide a minimum 50 mile separation distance between short-spaced stations. Finally, because the 40/22 dBu interference standard effectively addresses the concerns regarding interference to/from mobiles, no additional protective measures are necessary.

WHEREFORE, THE PREMISES CONSIDERED, the Utilities Telecommunications Council respectfully requests the Commission to adopt regulations consistent with the views expressed herein.

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Dated: June 14, 1993